DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: SIR-003210
Date Inspected: 20-Apr-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Changxing Dao, Shangha

Quality Control Contact:	Don Walton	**Quality Control Present:**	☑ Yes ☐ No
Material transfer:	☐ Yes ☐ No ☑ N/A	**Sampled Items:**	☐ Yes ☐ No ☑ N/A
Stock Transfer:	☐ Yes ☐ No ☑ N/A	**OK to Cut:**	☐ Yes ☐ No ☑ N/A
Rebar Test Witness:	☐ Yes ☐ No ☑ N/A	**Delayed/Cancelled:**	☐ Yes ☑ No ☐ N/A
Other:	Coatings Inspection		
Bridge No:	34-0006	**Component:**	Sub-Assemblies (OBG) and Sub-Assemblies (
Bid Item:	77,78,79	**Lot No:**	

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Facade Cover Plate Back Side 150mm Edges (18 Each), NOI Number 6255: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Facade Cover Plate Back Side 150mm Edges (18 Each) for dry film thickness (DFT) compliance. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required touch up of Interfine 979 Polysiloxane.

Facade Cover Plate External Surface (17 Each), NOI Number 6256: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Facade Cover Plate External Surface (17 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness), ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub). MEK test conducted x2 @ grade 5. Also tested in accordance with ISO 11127-6 and ISO 11127-7, soluble salts x1 readings recorded @ 11.6 (µs/cm). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers Internal Surfaces (4 Each), NOI Number 6257: In accordance with project specifications ABF and

ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barriers Internal Surfaces (4 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panels (3 Each), NOI Number 6259: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels (3 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness), ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub). MEK test conducted x2 @ grade 5 and x1 test on BK4A-014 recorded grade 3. Also tested in accordance with ISO 11127-6 and ISO 11127-7, soluble salts x1 readings recorded @ 28.3 (µs/cm). ABF Quality Assurance personnel instructed ZPMC to re-submit BK4A-014 for inspection prior to proceeding with process to the next check point. No other discrepancies noted on BK4B-001 and BK4A-013 and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Lengthways Splices SA6025A (2 Each), SA6025B (2 Each), L-Splices (12 Each), Splices X6513A (8 Each) and Shim Plates X6513D (8 Each), NOI Number 6260: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Lengthways Splices SA6025A (2 Each), SA6025B (2 Each), L-Splices (12 Each), Splices X6513A (8 Each) and Shim Plates X6513D (8 Each). Test results recorded x3 surface profile readings in the range of 72 to 86 µm. No major discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Galvanized Traveler Rails (43 Each), NOI Number 6262: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Galvanized Traveler Rails (43 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barriers External Surfaces (7 Each), NOI Number 6263: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Crash Barriers External Surfaces (7 Each) were tested in accordance with SSPC-SP 1 (Surface Cleanliness), SSPC-PA 2 Dry Film Thickness (DFT), ASTM D4752 (MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub) and ISO 11127-6 and ISO 11127-7 for the presence of soluble salts. All test results were acceptable and within desired limits with x1 MEK @ grade 4 and x1 soluble salts reading of (26.0 µs/cm). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection x4 Crash Barriers due to holidays and low DFT readings.

Splices X3294H (2 Each), X4094 (19 Each), X4099 (60 Each), Dehumidifier Bases (SA7540 and SA7053) and Crash Barriers (14 Each), NOI Number 6264: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Splices X3294H (2 Each), X4094 (19 Each), X4099 (60 Each), Dehumidifier Bases (SA7540 and SA7053) and Crash Barriers (14 Each). Test results recorded x3 surface profile readings in the range of 76 to 83 µm. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection Crash Barriers (14 Each) due to additional required grinding and blasting. No other discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point on remaining items.

Bike Path Panel BK4A-063, NOI Number 6265: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panel BK4A-063. Test results recorded x1 soluble salts reading of (14.0 µs/cm). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required grinding and blasting.

Crash Barrier Cover Plates (192 Each) and Bike Path Panel BK8A-002, NOI Number 6266: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barrier Cover Plates (192 Each) and Bike Path Panel BK8A-002 in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point on remaining items.

Lengthways Splices SA6025A (2 Each), SA6025B (2 Each), L-Splices (12 Each), Splices X6513A (8 Each) and Shim Plates X6513D (8 Each), NOI Number 6267: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Lengthways Splices SA6025A (2 Each), SA6025B (2 Each), L-Splices (12 Each), Splices X6513A (8 Each) and Shim Plates X6513D (8 Each) for dry film thickness (DFT) compliance. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Bike Path Panel BK4A-063, NOI Number 6265: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Bike Path Panel BK4A-063. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Sub-Assemblies (Tower)

Tower Head Sub-assembly Plates (ESD1-7C6-2 and WSD1-7C6-4), NOI Number T2051: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Tower Head Sub-assembly Plates (ESD1-7C6-2 and WSD1-7C6-4). Test results recorded x3 surface profile readings in the range of 73 to 82 µm. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to additional required grinding and blasting.

Tower Splices PL6-75 (18 Each), PL6-69 (10 Each), BP6-8 (2 Each) and BP6-7 (2 Each), NOI Number T2051: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Tower Splices PL6-75 (18 Each), PL6-69 (10 Each), BP6-8 (2 Each) and BP6-7 (2 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Tower Head Sub-assembly Plates (OUTSIDE CHANNEL ONLY) ESD1-7C6-2 and WSD1-7C6-4, NOI Number T2052: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Tower Head Sub-assembly Plates ESD1-7C6-2 and WSD1-7C6-4. No discrepancies noted and ABF Quality Assurance

personnel instructed ZPMC to proceed with process to the next check point.

Office

This Quality Assurance Inspector (QA) reviewed, recorded and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Cason,Kenneth	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer